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#### THE CENSUS ENUMERATION IN PRUSSIA.

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The methods followed in the Prussian census of December 1, 1890, were essentially the same as those which have been used by the Royal Statistical Bureau in Berlin since 1871, and which were then adopted in accordance with resolutions of the "Commission for the further extension of the statistics of the customs union (Zollverein)."

The complications and difficulties in enumeration, arising from the density of population in large cities, have led to the employment in Germany of two slightly different methods, one for the country at large and the smaller municipalities (where the limit may be set at about 40,000 inhabitants), and a slightly more complicated system for dealing with larger municipalities. We will consider these two systems separately, taking first that for the country at large, and then illustrate the workings of the second from the city of Berlin.

<sup>&</sup>lt;sup>1</sup>cf. Blenck. Die Volkszählung vom 1. Dezember, 1885. Zeitschrift des koniglich preussischen statistischen Bureaus. 1888. Heft I-II.

#### I. THE ENUMERATION IN THE COUNTRY AT LARGE.

### A. Officers of the census.

These may be classed in three groups:—

- 1. The Royal Statistical Bureau in Berlin (das königliche statistische Bureau in Berlin), a permanent office, which has the general charge of the census, plans for and provides the necessary schedules, etc., and transmits its instructions through the provincial authorities to—
- 2. The chiefs of the local government bodies (Gemeindeor Gutsbezirk-Vorstände). These may decide whether to carry out the work themselves, as is the case in small towns, or to appoint, as in all larger centres, local census commissioners (Zählcommissionen). The latter are to "serve without emolument, being persons in a position to grasp the importance of the census, and willing to conduct the enumeration, and at the same time possess the confidence of the people and a knowledge of the locality" (quoted from the official instructions). The duties of these commissioners, or of the local government boards in case no commissioners are appointed, are: (1) to lay out the enumerators' districts; (2) to appoint and instruct enumerators; and (3) to correct and control the work of the enumerators, fill out the general schedule, and transmit all the papers, etc., to the central office.

It will be remembered that the larger cities in Prussia are in police matters under the direct control of the royal state police. In all such cities the police are to act in common with the local commissioners and the local government boards. The extent of the assistance thus rendered by the police will be best seen when we come to examine the methods in Berlin.

3. The third group is that of the enumerators and their substitutes in case of detention. These are all volunteers, "who esteem the honor of being called upon to serve the country in this capacity a sufficient emolument for their

pains." This claim of the census authorities needs, however, to be modified by the statement that many of these so-called volunteers are directly or indirectly connected with the civil service of the local governments, and are excused from their other duties for the time necessary to do the work of the census. Thus, in Berlin a large number were men holding honorary, i. e., unpaid, offices under the city. Not a few are school teachers. There can be no doubt, however, that the census authorities obtain in this way a body of unusually intelligent, conscientious, and efficient enumerators.

The districts assigned each enumerator and his substitute, who often acts as his assistant, are very small. They are to be "so bounded that they shall not, as a rule, include more than forty households."

In cases where volunteers cannot be found the local authorities are bound to provide enumerators at their own expense. In such cases only more than one district may be assigned a single enumerator. The duties of the enumerator are to distribute the schedules, which are to be filled out by the people, to collect them again, and correct by inquiry or otherwise any mistakes apparent in them, or add to them where incomplete, and to fill out the general schedules for his district.

#### B. The scope of the inquiry.

It was recommended by the above-mentioned Commission that no questions should be connected with the population census and placed upon its special schedules which did not apply to the special conditions of the people counted. All other questions, as, for example, those general problems connected with agricultural and business interests, in as far as these were not necessary in order to ascertain the employment of the people counted, are left to be investigated by some other method less likely to produce confusion. A single exception to this general rule is the question of dwelling place, which can the more easily be included, as the enumeration must take place from house to house.

Within these limits each local government is permitted to make on its own responsibility "any changes in the schedules which will tend to ensure the final equality of the results." This important exception permits the printing of schedules and explanations in the language of the province, and similar changes.

It is further permitted that a number of large cities of over 43,000 inhabitants may on special request make certain additions to the general schedules for municipal purposes. The nature of these special additions, in the case of the city of Berlin, will be considered at the end of this article.

#### C. The schedules and other papers distributed.

All the schedules, instructions, and other papers issued are marked in order by letters of the alphabet, and it will be conducive to clearness if we retain the same letters whenever it may be necessary to refer to the different papers.

The population schedules which are distributed from household to household by the enumerators, sometime between the 28th and the 30th of November, to be filled in by the head of each family and returned to the enumerators after 12 o'clock noon on the first of December, consist of three distinct parts:—

- (1). The population schedules A, one for each member of the household present. The enumerator must ascertain the required number by inquiry at the house before November 30, and leave exactly that number. A slightly different schedule printed on pink paper and lettered a is to be used for members of the household temporarily absent.
  - (2). Household schedule B.
- (3). The census letter, or circular of instructions D, addressed to the head of the household and containing the explanations C. This circular is to be folded around the required number of schedules A and a, and one of schedule B as a wrapper for distribution.

We will now examine these schedules individually.

(1). Schedule A entitled "Schedule for those present in the household," bears three numbers, thus: "Schedule No. . . . of Circular No. . . . of District No. . . . " The first refers to its place in the household list, and the second is the number of the household in the order visited by the enumerator. For further identification of the schedule a blank is left for the insertion of the name of the city, the town, or the village, and of the administrative circle (Kreis).

The schedule contains the following twelve questions:—

- 1. Given and surname?
- 2. Relation or other connection to the head of the household?
- 3. Sex?
- 4. Age? and, if possible, day of the month and year when born?
- 5. Conjugal condition?
- 6. Calling, trade, profession, business, or means of sustenance?
  - (a) Name of calling?
  - (b) Position or rank in trade?
- 7. Birthplace?
- 8. Member of army and navy in active service, charge and company?
- 9. Religion?
- 10. Citizenship?
- 11. Mother tongue?
- 12. Home address of persons only temporarily present?

Questions 3, 5, and 11 are followed by a list of all possible answers, the correct ones to be underlined.

Schedule a reads the same as schedule A except that the title is ".. temporarily absent," and that the questions 9-12 are not included.

(2). Schedule B, the household schedule, or check list for each family, has two numbers, thus: "Household schedule of Circular No. . . . District No. . . ."

It is to contain a list of all members of the family according to surname and given name, relationship, or other connection to the head of the family, separated under the following heads: (1) Members present in the household. a. Regular members, male or female; b. Only temporarily

present, male or female. (2) Members temporarily absent, male and female. (3) Religion.

Every person for whom a separate schedule A or a has been filled out must be included in the household list B, and, on the other hand, the first numbers of schedules A and a must correspond with the numbers beside the same names on the household list.

At the bottom is a voucher for the accuracy of the returns to be signed by the head of the household, or failing that by the enumerator.

(3). The census letter, or circular D, is a long sheet of paper folded in three parts and containing, on the inside, elaborate and minute instructions for filling out the schedules, a work, be it borne in mind, to be done by the heads of the families. On the outside are two specimen copies of schedules A and B filled out, and in the middle are blank forms for addressing the whole to the head of the household, and spaces for recording how many of schedules A and a and of B have been enclosed, for it will be remembered this was to be wrapped round the required number of schedules for each family. At the bottom is an appeal in the name of the local authorities urging upon the head of the household the importance of the census and the necessity of filling out the blanks properly.

Of the instructions contained inside the circular D and designated C we will note only the more important. The head of each household, or family, is responsible for filling in the schedules and for seeing that all members of the household are counted. By a household is meant all the persons occupying in common the same dwelling and eating at the same table. Persons living alone in a separate dwelling and maintaining a separate table are to be treated as a household of one. Lodgers, hotel guests, and the like are to be included in the household of their host. A somewhat anomalous case, and one difficult to classify, was that of the students. The German student generally occupies rooms

sublet to him by a tenant, has his early morning coffee and his evening meal brought to him in his room by his landlady, and goes out to the restaurant for his breakfast (frühschoppen) and midday dinner. He is therefore much like any other lodger except as regards two meals. It was decided, however, in Göttingen, and I believe also in most other university towns, to consider each student as a household of one, that is, as a family of which he is the head and sole member. The question of what shall and what shall not constitute a household is chiefly technical in its character.

The persons to be counted are all those without exception who passed the night from Nov. 30 to Dec. 1 in the household, and also all those regular members of the household who are temporarily absent, without having given up their regular abode. Travellers, railroad and postal officials, and the like, who did not pass the night in any household are to be counted in the household where they arrive on the morning of the first of December. Should they not arrive at any household up till noon of December 1, they would still be covered by the temporarily absent schedule a. As the census theoretically represents the exact state of the population at 12 o'clock midnight of the night of Nov. 30 to Dec. 1, all children born during the night after 12 o'clock are not to be counted, nor persons dying before that hour.

Under the instructions for answering the several questions we note especially the following: under Question 4 is sought the exact date of birth, and only in cases where it is impossible to ascertain that the age in years. The value of this for the accurate calculation of mortality tables is well known. Under Question 6 the richness of the German vocabulary, in terms to designate not only all callings and trades but also the exact position of each individual in his trade or calling, obviates most of the difficulties met by English statisticians, and does away with the necessity for long instructions on this point.

Each enumerator receives a copy of the special instruc-

tions to enumerators E and a check list F. In this check list he is to enter a list of all the buildings in the district, of the households in each building, and the number of persons belonging to each and included in the different census letters D. The regular method of procedure for the enumerator would be first to make a round of his district, check list in hand, and record first the buildings by street and number; second, the number of households in each building by name of the head of the household; third, the number of members of each family. He would then return home, and with this preliminary count as a basis make up and address to the heads of the families his little packages of schedules for distribution. Many of the enumerators, however, saved themselves one trip by distributing the schedules at the same time they made up the list F.

A summary for each community is made out in form G. In this each enumerator's district is designated and its contents are entered by the local commissioners, and from this the preliminary returns are estimated.

## D. Summary.

The chief points to note in connection with the taking of the Prussian census are: 1. The work is done by the local officials, assisted by a volunteer corps of unpaid commissioners and enumerators. 2. The schedules are filled out by the heads of the varions families counted, according to the instructions given them at the time. 3. The system of checks on the accuracy of the contents of the separate population schedules, in the household schedule and enumerators' check list, enable most errors to be detected and many of them to be corrected without referring back to the household in question.

As to the accuracy with which the schedules were filled out I can speak from personal knowledge, having had the privilege of examining a large number of the schedules from the city of Göttingen. They were in general filled out with accuracy and intelligence,—such errors as were found being mostly of a technical nature, or on a question of doubt. Nowhere was there any trace of a malicious intention to falsify the returns, or to treat the work of filling out the schedules other than as a serious duty to be willingly rendered. In some cases, but these were the small minority, where the returns had been insufficient, the schedules had been completed by the enumerator himself. Only in a very few cases did the schedules come in soiled or torn. Not a few of the cards showed by the handwriting that the scribe had been a school boy or girl, and these were generally cases of the greatest neatness and accuracy.

One very great guarantee for the accuracy of the work in general is in the fact that the enumerators have each a small district, generally that in which they reside, and are often, from the nature of their regular calling, as, for instance, the school teachers noted above, intimately acquainted with the families in their districts.

# II. SPECIAL METHODS IN LARGE CITIES AS ILLUSTRATED BY BERLIN.

As we have already noted, the exigencies of city life make many changes in the above methods advisable, and the nature of these changes will be most readily appreciated if we take the city of Berlin as an example. It is not to be inferred, however, that the same methods were pursued in all the other large cities of the kingdom, for this is not so. Each had its own difficulties to contend with, and each had its own way to meet them. But Berlin is decidedly the most interesting example we could choose, and will serve well to indicate the nature of the changes made.

The counting of the thousands of human beings packed into the large tenement houses of Berlin could not safely be left to chance volunteers from any and all parts of the city. The enumerators must be carefully selected, and, if possible, found on the spot. Nor could such a large number of enumerators, as would be necessary, do their work well under mere general instructions. Each group of them must be under some direct and efficient control. This is the form in which some of the difficulties which had to be contended with in Berlin presented themselves to the minds of the census authorities.

To offset these difficulties there were some special advantages. Thus, the police keep a complete and accurate list of all the people resident in the city, with their addresses. The extreme care with which this list is kept up is known to all who have spent any length of time in a large German city. This list would form a sound basis on which to start the enumeration, and, according to the general law above cited, the police are obliged to assist.

#### A. The officers of the census in Berlin and their functions.

- 1. The City Statistical Office (statistisches Amt der Stadt), a permanent bureau, like its rival and superior, the Royal Bureau. This has the preparation of the schedules, the general supervision of the work, and the collating of the results.
- 2. The City Census Commission (städtische Volkszählungs-Commission), consisting of four members from the city executive department (Magistrat), eight from the city representatives (Stadtverordnete), together with the chief of the city statistical office, at present the well-known statistician Dr. Böckh, and a police commissioner (Commissar des königlichen Polizei-Präsidii); in all 14. The primary division of the work is according to the 82 police wards, which the commissioners divide among themselves for supervision. The commissioners appoint for each ward—
- 3. A Ward-deputy (*Revier-Deputirten*), who has the assistance of a police-deputy appointed by the president of police and of the chief of the ward police. Their duties are (1) to divide the 82 wards into yet smaller districts, which is done

on the basis of a list of the buildings in the ward, designated schedule K, provided by the police (of this list we shall have occasion to speak further on); and (2) to appoint for each district—

4. A District Commissioner (Districts-Commissar). These gentlemen are to be chosen from the list of those persons who hold honorary, i. e., unpaid, offices in the city government, as well as from others who have volunteered to take part in the census work. When possible they are residents of the district, or at least of the ward. The district commissioner then subdivides his district into enumerator districts, making each piece of real estate a separate district, the house or houses standing on the same building lot forming an enumerator's district. He then sends to the owner of each parcel of real estate, or, in case the owner does not reside on the property, to his agent (in Berlin the owner of a large tenement house is obliged either to live on the place or to have a responsible representative or agent there), a schedule L to fill in, which shall give the number of families resident in his building. The district commissioner appoints an enumerator for each estate, or where the buildings are small for two or more adjoining estates. In the large tenement houses the enumerator would be not infrequently the owner or his representative, and always, where possible, some one residing in the house.

We have therefore five groups of census officers: 1. City statistical office. 2. City census commission. 3. Ward-deputies and the police assistants. 4. District commissioners. 5. Enumerators. The man who is really responsible for the work of enumerating, and who corresponds most nearly to the enumerators in the country at large, is the district commissioner. The enumerators only play the part of his assistants.

# B. The extent of the preparatory work.

We have seen that before the district commissioner sets his enumerators to work a certain amount of preparatory work has been done, opening up the ground. This consists of the two schedules mentioned above, K and L. The first is a list furnished by the ward-deputy, and made up from the police and other records of all the buildings in his district, and of the number of families in each. The second, which he gets each house owner or his agent to fill out, gives him a list of the families in the building and the number of persons in each family.

When this preparatory work has been completed, and with the material thus won as a guide and check, there follows the distribution of the population and other schedules by the enumerators and their collection in exactly the same manner as already described for the country at large, except that the district commissioner directly oversees the work of the enumerators.

We note in passing an extra schedule J, called the estate schedule, which is filled in by the owner and gives a description of the buildings, the number of tenements, and uses other than as dwellings to which rooms are put.

To sum up, the district commissioner receives, as we have seen, preliminary information, as to the inhabitants of his district, from two distinct sources: (1) from the schedule K filled out by the police; (2) from the preliminary house schedule L filled out by the house-owner.

The difficulties which we noted at the beginning of this part were met by the introduction of two sets of officers between the local commissioners and the enumerators, namely, the ward-deputy with his police assistants, and the district commissioners.

The questions asked in Berlin were the same as those for the country at large with some important additions. We will pass now to a consideration of these additions.

#### C. Additional questions for Berlin.

On population schedule A there were 5 questions added:—

- 13. Since when resident in Berlin?
- 14. Connected with which religious congregation in the city? (Some 12 are named).

- 15. In case of independent business concerns:
  - (a) How many employees?
  - (b) Is business carried on by partnership? If so, state the firm's name.
  - (c) Do you belong to a guild? If so, to which?
- 16. Blind? Deaf and dumb?
- 17. In the case of children less than one year old state: -

Until when has the child been brought up on mother's milk? On nurse's milk? How long, or until when, on animal milk? How long on some substitute for milk? On other food?

More important, perhaps, but at least more numerous, are the additions to the household schedules B which refer to the dwelling accommodations in Berlin.

These are eight questions: —

- 1. Are you owner of this house? or renter of this dwelling? or is it sublet to you? or do you live rent free as official, as employee, or otherwise?
- 2. Is the dwelling in the cellar, the ground floor, or up 1, 2, 3, 4, or 5 flights?
- 3. How many rooms in your dwelling? how many are heatable? not heatable? how many have windows on the street? is there any business carried on in your rooms? if so, in how many?
- 4. Has your dwelling, besides the above, a kitchen? or do you share the kitchen with other families? has your dwelling a store-room? bathroom? presses? attic? servant's rooms?
- 5. Do you use, besides the rooms noted in 3 and 4, any special rooms in the house as stores? as public house or restaurant? as office? as business and store-rooms? as workshops or factory rooms? as depot, coachhouse, or stable?
- 6. Is the water system used in the dwelling? if so, in common with other families? has the dwelling bathing facilities and water closets? if so, are they in common with other families?
- 7. \*Yearly rental of the dwelling (including extras) in marks? in case of owners, rent free, etc., estimated rental in marks? yearly rental of separate business rooms in marks?
  - 8. \*Since when have you occupied this house? (year and month).

This thorough investigation of how the population of Berlin is housed will undoubtedly give us some interesting results. The weak point is Question 7. The returns on this

 $<sup>\</sup>pmb{*}$  In the schedules questions 7 and 8 bear the numbers 8 and 9, number 7 being apparently omitted.

point may, however, be corrected by comparison with the tax list, for the rent tax (*Miethssteuer*) and the house tax (*Haussteuer*).

#### III. THE COST OF THE CENSUS.

In conclusion it might be interesting to note the estimated cost of doing the work. The final accounts for the census of 1890 cannot be had probably until next spring, but the amount is not expected to greatly exceed that of 1885, which was 505,300 marks, or a per capita expenditure of 1.78 pfennigs, about 4.3 mills. This is less proportionately than it was in 1880, 1.83 pfennigs, and much less than in 1875, 2.27 pfennigs, or a trifle over half a cent. This estimate does not include, however, the cost of printing the results. It must not be forgotten also in this connection that the large body of census workers is unpaid. The only labor included in the above sums was that of extra clerks in the Berlin statistical bureau. Some few incidental expenses were also borne by the local governments.

The value of this census is greatly enhanced by the fact that practically the same methods have been in use since 1861, and in general the same questions asked.